

REMARKS/ARGUMENTS

Applicants thank the Examiner for the careful consideration given the present application, and respectfully request favorable reconsideration of the application in view of the comments set forth below.

Interview Summary – 37 C.F.R. §1.133

Applicants thanks the Examiner and Supervisory Patent Examiner Fischer for taking the time to conduct a telephone interview with the undersigned attorney on May 11, 2011. During the telephone interview each of the independent claims was discussed in view of the cited art. Specifically, the selection of the caller and callee addresses from a table of addresses dedicated for assignment to the terminals based on their status to a tunnel communication was discussed. The Examiner proposed language that could be added to the claims to differentiate the claimed invention from merely assigning a randomly-selected address to the caller and the callee. Applicants amendment to the claims herein reflect the conversation that took place during the telephone interview.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 4, 8-9, 16, 20, 24, 25, 27, 28 and 54 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,614,809 to Verma *et al.* (hereinafter “Verma”) in view U.S. Patent Application Publication No. 2004/0236855 to Peles (hereinafter “Peles”), and further in view of what is alleged to be well known in the networking art (hereinafter “Knowledge”). However, Applicants respectfully submit that the combination of Verma, Peles and Knowledge fails to disclose every feature of the amended claims.

Regarding claim 4, Applicants respectfully submit that the combination of Verma, Peles and Knowledge fails to teach, suggest or otherwise render predictable an address determination part including a computer-readable memory storing a table comprising a plurality of addresses that are dedicated for assignment to a caller and separately stores a plurality of other addresses that are dedicated for assignment to a callee during initiation of a tunnel communication. Claim

4 requires the address determination part to select, from the plurality of addresses, the caller address for the information-processing device when the information-processing device is the source and the different callee address, from the plurality of other addresses, for the information-processing device when the information-processing device is the destination.

Since the callee address is returned in claim 4 from the plurality of other addresses (i.e., addresses dedicated for the callee, which are other than those addresses dedicated for assignment to the caller), the information-processing device will be assigned different addresses when acting as the caller as opposed to the callee of a tunnel communication. In other words, different tunnel communication addresses will be returned for the same information-processing device when involved in different tunnel communications, one as the source and the other as the destination. This is true even when the information-processing device is involved in multiple different tunnel communications with the same counterpart, but in different roles.

By way of a specific example, FIG. 15B of the present application illustrates an embodiment of the table separately storing the addresses dedicated for assignment to the caller (i.e., 192.168.0.1, 192.168.0.3, 192.168.0.5 and 192.168.0.7) and the other addresses dedicated for assignment to the callee (i.e., 192.168.0.2, 192.168.0.4, 192.168.0.6 and 192.168.0.8). The possible caller addresses end with an odd number, and the possible callee addresses end with an even number. As can be seen from FIG. 15B, a different address will be returned for the claimed information-processing device when the status of the information-processing device changes between the source and destination.

Verma fails to make any distinction between the status of an information-processing device as a source or destination in assigning a tunnel communication address to that information-processing device, much less select from a table of dedicated addresses. At most, Verma uses the phrase “tunnel initiator” to refer to the caller and the phrase “tunnel endpoint” to refer to the callee. However, this terminology is simply used to clarify to the reader of Verma the role each terminal plays in a tunnel communication. The terminals in Verma could have been referred to as “Terminal A” and “Terminal B”, since Verma makes no distinction in returning an address for tunnel communications based on the role of the terminals included in such a tunnel communication. Accordingly, Applicants respectfully submit that Verma fails to teach, suggest or otherwise render predictable making a distinction, much less selecting an

address from a table of dedicated addresses to be encapsulated during initiation of a tunnel communication, based on the status of the information-processing device as a caller or callee as required by claim 4.

Similarly, Peles describes selecting an existing tunnel to be used for a tunnel communication, and then using the tunnel addresses assigned to the selected tunnel for the information-processing devices. However, according to Peles, the tunnel address is not selected based on the status of the information processing devices as either the caller or the callee. The information-processing device selecting the tunnel addresses for a tunnel communication will return the same address for itself during each tunnel communication based on the tunnel selected, not the status of the information-processing device. In other words, the address determination part of the information-processing device in Peles will always return the local address for itself, and the remote address for the counterpart to the tunnel communication. For the example shown in Table 1 of Peles, if communication is to take place using tunnel 12, the tunnel address 100.1.1.1 will be returned for the information-processing device. This address will be returned for the information-processing device regardless of whether the information-processing device is the caller or the callee. For communications taking place using tunnel 12 in Table 1 of Peles, the tunnel address of the local information-processing device will always be 100.1.1.1, and will not change dependent upon whether that information-processing device is the caller or callee as required by claim 4.

Applicants also respectfully submit that the claimed address determination part would not be obvious to one of ordinary skill in the art. Conventionally, heuristic approaches such as DHCP and AutoIP have been utilized to assign tunnel addresses to information-processing devices involved in tunnel communications. Such approaches require information-processing devices to submit an inquiry to a server to determine whether a particular tunnel address is available. Since such servers are responsible for assigning tunnel addresses to many, possibly all information-processing devices in a network, the server would not assign the same tunnel addresses to multiple different information-processing devices to avoid a scenario where more than one party to a tunnel communication is assigned the same address. Likewise, the approach of assigning a fixed address to an information-processing device based on the tunnel used as described by Peles also suffers from the same drawbacks as the conventional heuristic

approaches. Nothing in Peles indicates that the tunnel address therein can be returned for information-processing devices participating in other tunnel communications using different tunnels.

The claimed invention, in contrast, allows the information-processing devices themselves to assign tunnel communication addresses for an individual tunnel communication based on their status as source or destination. Since the information-processing device assigns the tunnel addresses, it can do so without using a heuristic approach, and allows the other information-processing devices participating in other, different tunnel communications to use the same tunnel addresses without fear of assigning the same tunnel address to more than one information-processing device. One of ordinary skill in the art would not find the claimed address determination part obvious in view of the heuristic approaches to assigning tunnel addresses disclosed in the prior art, or the approach of assigning a fixed address to an information-processing device based on the tunnel used as described by Peles.

Regarding claim 20, Applicants respectfully submit that the combination of Verma, Peles and Knowledge fails to teach, suggest or otherwise render predictable the claimed address determination part for reasons analogous to those discussed above for claim 4. Specifically, Verma and Peles fail to teach returning different addresses selected from a table of dedicated addresses for an information-processing device when that information-processing device is the source of a tunnel communication and when the information-processing device is the destination of a tunnel communication. Again, Verma does not disclose assigning addresses based on such a distinction, as correctly noted in the Office action. And although Peles describes selecting an address from a table, the address selected for a given information-processing device does not change, much less change based on the status of the information-processing device as a source or destination of a tunnel communication as claimed in claim 20. Further, one of ordinary skill in the art would not find the claimed address determination part in view of the conventional heuristic approaches to assign tunnel addresses, or in view of the teachings of assigning a fixed address from a table to an information-processing device as disclosed by Peles.

For at least the above reasons, Applicants respectfully submit that the combination of Verma, Peles and Knowledge fails to teach, suggest or otherwise render predictable every feature recited in claims 4 and 20 as required to maintain a rejection of those claims for purposes of 35

U.S.C. §103(a). Further, Applicants respectfully submit that one of ordinary skill in the art would not find the absent features obvious in view of the combined teachings of Verma and Peles.

Claim Rejections – 35 U.S.C. § 103(a)

Claims 11-15, 32, 36, 37 and 58 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Verma in view of Peles, and further in view of U.S. Patent No. 7,395,354 to Keane *et al.* (hereinafter “Verma”). However, Applicants respectfully submit that the combination of Verma, Peles and Keane fails to disclose every feature of amended claim 32.

For reasons analogous to those discussed for claims 4 and 20 above, Applicants respectfully submit that the combination of Verma, Peles and Kean fail to teach returning different addresses from a table of dedicated addresses for an information-processing device when that information-processing device is the source of a tunnel communication and when the information-processing device is the destination of a tunnel communication as recited in claim 32. The Office action explains that the combination of Verma and Peles teaches such a feature, but Verma does not disclose assigning dedicated addresses based on such a distinction, which is noted in the Office action. And although Peles describes selecting an address from a table, the addresses in the table are not dedicated for assignment based on the status of the information-processing device as a source or destination of a tunnel communication as claimed in claim 32. Keane likewise fails to teach such a feature as recited in claim 32.

Further with regard to claim 32, Applicants respectfully submit that at least one of the caller address and the callee address is to be assigned to a different information-processing device involved in a second of the plurality of different tunnel communications. The Office action explains that Keane and Peles teaches using the same address for information-processing devices involved in different tunnel communications. However, Keane describes translating conflicting addresses to avoid a scenario where a common address is used for multiple information-processing devices. In other words, Keane teaches assigning different addresses to information-processing devices that have conflicting addresses for a communication. And Peles describes assigning tunnel addresses to information-processing devices taking part in the same

tunnel service. ¶[0042]. There is no description in Peles of assigning a common tunnel address to different information-processing devices involved in different tunnel communications as claimed in claim 32.

Additionally, Applicants respectfully submit that a method requiring a common address to be assigned to multiple different information-processing devices involved in different tunnel communications is not obvious in view of the contrary teachings of Peles. According to Peles, different addresses are used for communications over different links. ¶[0026]. Each of the addresses assigned in Peles is unique to the selected tunnel, and the specific terminal involved. In the various tables of Peles, the same address assigned to a first station communicating via a first tunnel is not assigned to, or even an option for selection for a different station communicating via a different tunnel. The purpose of Peles is to avoid such a result, and modifying the teachings of Peles to arrive at the invention of claim 32 would drastically change the principle of operation of Peles, rendering such a combination improper.

For at least the above reasons, Applicants respectfully submit that the combination of Verma, Peles and Keane fails to teach, suggest or otherwise render predictable every feature recited in claim 32 as required to maintain a rejection of that claim for purposes of 35 U.S.C. §103(a). Further, Applicants respectfully submit that one of ordinary skill would not find the claimed invention obvious in view of the combined teachings of Verma, Peles and Keane.

The remaining claims in the present application are allowable for the limitations therein and for the limitations of the claims from which they depend.

New claims 60 and 61 are being added by way of the present amendment. Each requires returning the address from the table to establish the tunnel that is to be used for the tunnel communication. Peles describes selecting an address for an information-processing device based on the existing tunnel (i.e., previously established prior to returning the address from the table) selected for the particular tunnel communication. Thus, none of the cited references discloses initially establishing a tunnel that is to be used for the communication by returning the address from the table as claimed.

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the

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application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any fees resulting from this communication, please charge same to our Deposit Account No. 16-0820, our Order No.: MTIS-40442.

Respectfully submitted,
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